

Title (en)
Vacuum insulation panel

Title (de)
Vakuumisolationspaneel

Title (fr)
Panneau isolant à vide

Publication
EP 1647758 A3 20120328 (EN)

Application
EP 05022295 A 20051012

Priority
JP 2004297084 A 20041012

Abstract (en)

[origin: EP1647758A2] The invention provides a vacuum insulation panel (20) to which moisture and gas do not easily adsorb while it is being processed or being in storage in an unfinished state. The vacuum insulation panel (20) includes a core (21) provided with air circulation, a getter material (22) which adsorbs moisture and gas from the core (21), an inner film bag (23) which accommodates the core (21) and the getter material (22), and an outer barrier bag (24) which accommodates the inner film bag (23). The getter material (22) is filled in an incision provided on the surface of the core (21). To prevent the getter material (22) from getting out of the incision, the opening of the incision is narrowed by evacuating air from the interior of the inner film bag (23) and, concurrently, compressing the inner film bag (23) and the core (21).

IPC 8 full level
F16L 59/04 (2006.01)

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Citation (search report)

- [X] JP 2004218746 A 20040805 - MATSUSHITA ELECTRIC IND CO LTD
- [AD] JP H04337195 A 19921125 - HITACHI LTD
- [X] JP H06156550 A 19940603 - TAIYO SANSO CO LTD
- [A] JP 2001295986 A 20011026 - BENKAN CORP
- [A] JP H10299982 A 19981113 - TABAI ESPEC CORP
- [E] EP 1647759 A2 20060419 - HITACHI HOME & LIFE SOLUTIONS [JP]
- [E] EP 1724513 A2 20061122 - HITACHI HOME & LIFE SOLUTIONS [JP]

Cited by

WO2019038508A1; EP2832340A1; EP2801774A4; FR3070471A1; CN111295545A; US11091907B2; US9243836B2; EP2339277B1

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EP 1647758 A2 20060419; EP 1647758 A3 20120328; CN 100380044 C 20080409; CN 1760582 A 20060419; JP 2006112438 A 20060427;
JP 4576195 B2 20101104; KR 100651098 B1 20061129; KR 20060053143 A 20060519; TW 200622136 A 20060701; TW I294502 B 20080311;
US 2006076863 A1 20060413; US 7517576 B2 20090414

DOCDB simple family (application)

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TW 94126343 A 20050803; US 24652105 A 20051011